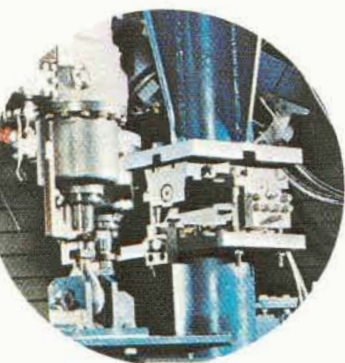


**THE ANNUAL REPORT OF
BROWN ENGINEERING COMPANY, INC.
FOR THE YEAR ENDED
DECEMBER 31, 1965**

1965

VII



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FINANCIAL HIGHLIGHTS

	1965	1964 (2)
Net sales	\$45,302,418	\$42,381,754
Net Income	\$ 1,134,484	\$ 924,641
Net income per share (1)	\$ 1.52	\$ 1.24
Cash flow per share (1)	\$ 2.96	\$ 2.53
Dividends paid	\$ 146,552	\$ 141,753
Total salaries and wages	\$27,567,103	\$28,223,987
Net additions to buildings, leasehold improvements, and equipment	\$ 1,252,406	\$ 1,740,917
Total stockholders' equity	\$ 7,230,084	\$ 6,178,717
Working capital	\$ 2,620,785	\$ 1,964,752
Number of stockholders of record	2,460	2,538
Number of employees	3,694	3,335

(1) Computed on total shares outstanding at close of year 1965

(2) Restated for pooling of interest

MAJOR ACCOMPLISHMENTS

Received long-term mission support contracts.

Built large electronic ground support systems for Saturn program.

Acquired Electro-Mechanisms, Inc., a New England electronics manufacturer.

Began construction on electronics manufacturing plant at Lewisburg, Tennessee.

Established Information Sciences, Inc., in key southeastern cities.

Depicted on the cover are the six areas of activity currently being pursued by Brown Engineering. The subject of each picture is shown again inside the report together with an explanatory caption.

TO OUR STOCKHOLDERS

The year 1965 marked an important 12 months for Brown Engineering Company. Increased sales and earnings were accompanied by other significant events that promise to profoundly affect Brown's future.

For the fifth straight year, the company's sales and earnings increased over those of the previous 12 months. Sales in 1965 totaled \$45,302,418. Net earnings, reaching the \$1 million mark for the first time, were \$1,134,484, or \$1.52 per share. This compares with sales of \$42,381,754 and earnings of \$924,641, or \$1.24 per share, in 1964.

Long-term contracts having a poten-

In addition to his responsibilities as president and chairman of the board of Brown Engineering Company, Milton K. Cummings is active in community, state, and national affairs.

tial value of more than \$100 million were awarded the company to provide technical support to the National Aeronautics and Space Administration's George C. Marshall Space Flight Center. The latest awards replaced a number of short-term contracts Brown held with this key NASA installation, and offered the company a solid economic base for the next five years.

Brown expanded its markets and capabilities, especially in electronics and information systems, through smaller firms as subsidiaries, new equipment, and facilities. Brown acquired Electro-

Mechanisms, Inc., a New England electronics firm, and established Information Sciences, Inc., in Atlanta, Georgia, to provide management and computer services. In addition, the company entered an option to purchase Trans-Data, Inc., a Huntsville electronics firm.

Construction was begun in 1965 on a manufacturing plant at Lewisburg, Tennessee, to house a part of the company's growing electronics operations, and a highly advanced computer was installed in Brown's data processing laboratory at Huntsville.

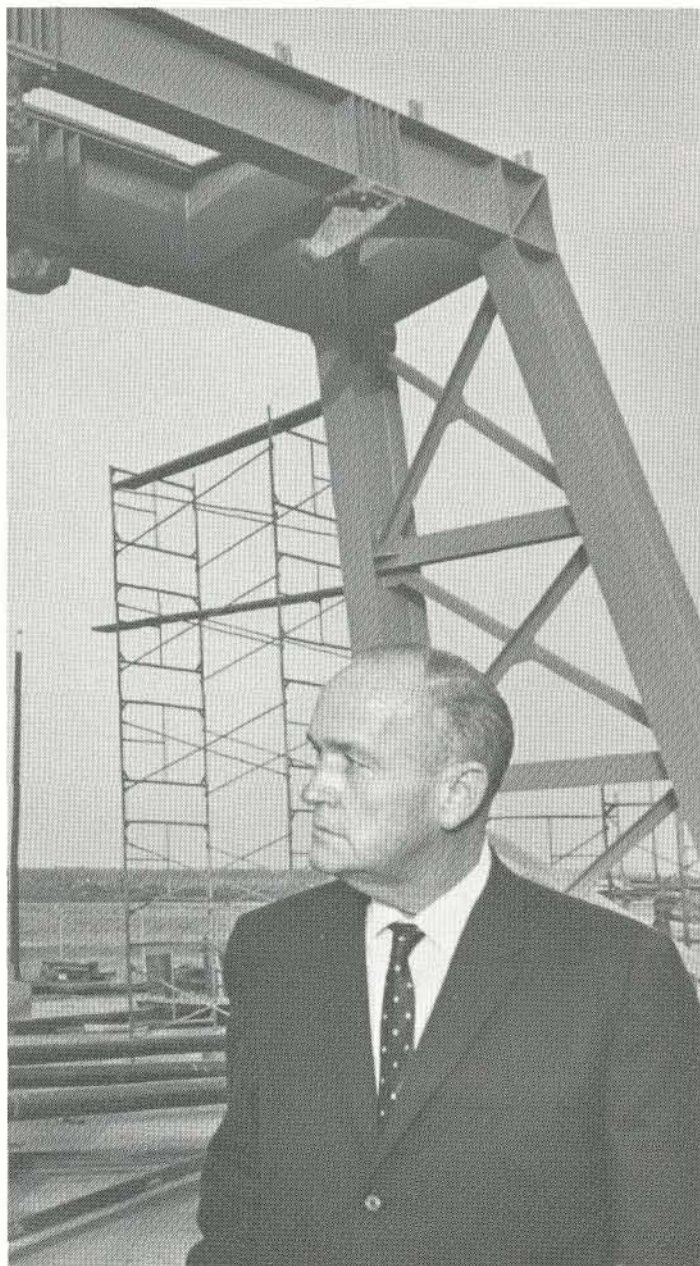
At year's end, Brown had more than

3,600 employees, highest employment in the company's history, and locations in six states. We believe the events of 1965 will strongly influence the future success of Brown. Our long-term contracts, along with our expanded capabilities and markets, give us a solid foundation for growth.

We are grateful to the many persons — customers, stockholders, and employees — who made 1965 such a significant period in Brown's history. Their continuing interests in our company give us every reason to look to the future with great confidence.



Milton K. Cummings
Chairman and President



THE FOUNDATION

As 1965 ends, Brown finds itself in an unusually strong position. During the past 12 months, the company built a solid economic and technical foundation for future growth and diversification in aerospace, defense, and industrial markets. A series of significant developments contributed to this foundation . . . developments that mark a high point in Brown's 11-year history.

Mission support contracts at the NASA / Marshall Space Flight Center represent significant blocks in this foundation for future growth and diversification. In this area, Brown won two long-term prime awards and two significant subcontracts. At the same time, Brown substantially broadened its activities as a designer and builder of sophisticated electronic systems and subsystems, receiving two multimillion dollar contracts to build ground-based

checkout equipment for Saturn space vehicles. Further, the company augmented its electronics capabilities through the acquisition of a specialty firm and the expansion of facilities. Finally, Brown directed its unique experience in information sciences toward a growing commercial market while continuing to participate in aerospace and defense activities.

These developments are key blocks in this foundation from which Brown plans to build, expand, and diversify in the years to come. The following pages describe the developments and their importance to the company, under headings that depict Brown's major areas of interest.

MISSION SUPPORT / America's use of private industry to augment national research and development missions for

Experimental model of a moon vehicle, designed and built by Brown Engineering for Advanced Studies Office of NASA's George C. Marshall Space Flight Center. Similar vehicles may someday be used to transport astronauts over lunar surface.



space and defense deeply involved Brown in programs of the National Aeronautics and Space Administration and the Army during 1965. The company made significant contributions to these agencies toward the development of large space boosters for space exploration and modern missiles for defense.

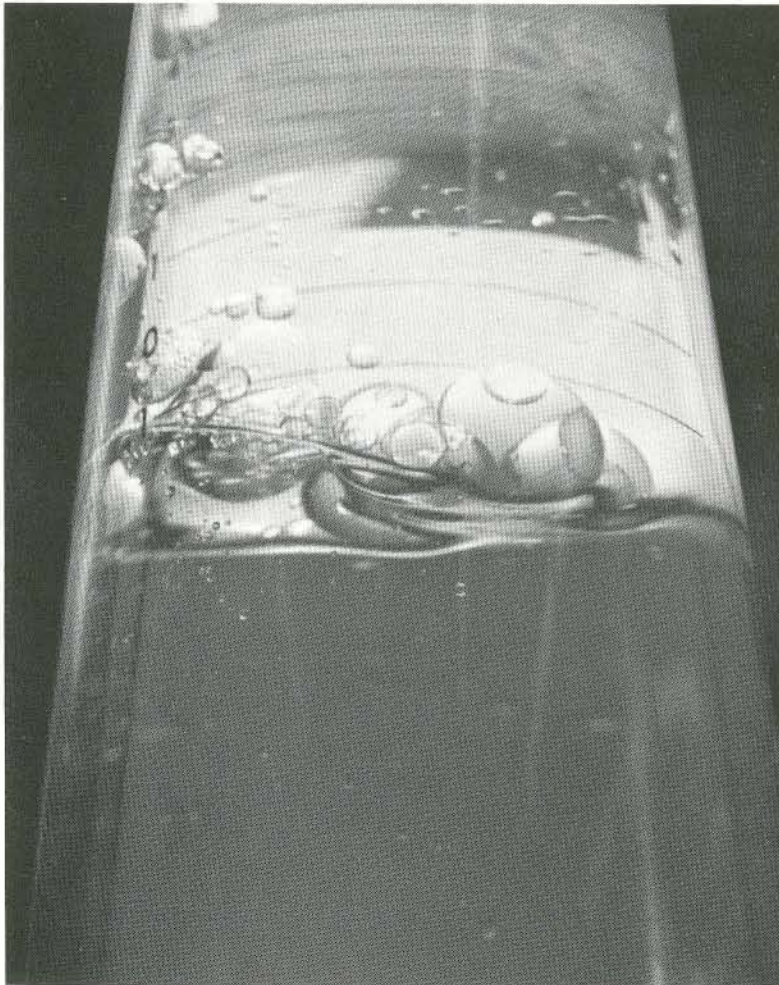
In 1965, Brown received new long-term contracts to support programs of the Marshall Space Flight Center. The awards included prime contracts to support the Propulsion and Vehicle Engineering Laboratory and the Research Projects Laboratory at the center, as well as subcontracts to support the Test Laboratory and the Quality and Reliability Assurance Laboratory. These contracts represent potential sales of more than \$100 million for Brown over a

five-year period. Since these are award-fee type contracts, under which the company's fee is governed by the quality of its performance, Brown has the opportunity to realize greater profits than it did from former mission support agreements.

As the prime contractor to the Propulsion and Vehicle Engineering Laboratory, Brown provides technical support to MSFC's mission to develop Saturn space boosters for America's moon program. The company has technical and professional personnel of almost every scientific discipline assigned to this task. Their work includes such activities as the analysis of the Saturn vehicle's structure, engines, and propulsion systems; the integration of major systems that are necessary to form the complete vehicle; the evaluation of related ground support equipment; and

the study of materials used in the vehicles. Brown also contributed to such advanced projects as preliminary studies for manned orbital vehicles and lightweight surface vehicles for lunar exploration.

Brown's significant contributions to MSFC's Quality and Reliability Laboratory included the development and operation of an automated information storage and retrieval system which provides reliability data on parts and materials used in the Apollo space program. Known as the Apollo Parts Information Center (APIC), this system is able to automatically answer the queries of other NASA centers and industries associated with the space program. The highly sophisticated system is particularly advantageous to today's widespread, but fast moving, space program, because it accepts inquiries 24



To determine the reaction of fuel in the tanks of a space vehicle when it is beyond the pull of the earth's gravity, Brown developed a unique method for simulating this condition by letting one fluid float in another. Here, a blue liquid, floating in a red fluid, is vibrated to show researchers what might take place in the fuel tank of a moving space vehicle.

hours a day and transmits or receives text, photographs, and drawings over a world-wide network.

In support of the MSFC Test Laboratory, Brown tests components and sub-systems for space vehicles and related ground support equipment by evaluating their reaction in hostile environments. Additionally, the company designs facilities for testing engines and boosters, and designs and builds special fixtures that are used in experimental testing.

Brown's role in the space program at the Marshall Space Flight Center also encompasses projects that lie beyond today's Apollo moon mission. As the prime source for technical support to MSFC's Research Projects Laboratory,

the company is a principal participant in scientific programs associated with man's continuing investigations of the universe after he reaches the moon.

The company made significant contributions in 1965 to the Army's development of missiles and aircraft, as well as an automated system for storing and retrieving engineering data. Brown supported the Army Materiel Command's Nike-X Project Office in the development of America's anti-missile missile system through the performance of engineering, design, and analysis tasks. Under a contract from the Army Missile Command, the company developed a guidance and control system for a new anti-tank missile. In addition, re-

search and development support was provided for inertial guidance and control equipment for a VTOL (vertical takeoff and landing) aircraft.

RESEARCH / The selection of Brown to support NASA's Research Projects Laboratory at the NASA / Marshall Space Flight Center (MSFC) reflects significantly on our increased capabilities in this area. In addition to providing assistance to this MSFC function, Brown's research capabilities were also directed toward the accomplishment of scientific studies for other NASA organizations, the Army, and Navy, as well as the development of new products and technologies for the company.

Under the contract with MSFC's Re-



Brilliant red laser beam is shown here providing a probe for precise measurement of liquid velocity without disturbing flow. This is one of the many laser studies being undertaken by Brown's research laboratories.

search Projects Laboratory, Brown is engaged in such studies as the selection of landing sites on the moon, the analysis of proposed experiments man may perform when he reaches the moon, and the extended exploration of the moon. Other projects include the study of materials to protect manned space vehicles against the hostile environment of space, and the design of an advanced sensor to monitor the behavior of thermal control coatings on orbiting satellites.

Brown's Research Laboratories also participated in the development of a revolutionary system that will enable a scientist or engineer to use large, sophisticated computers from his lab-

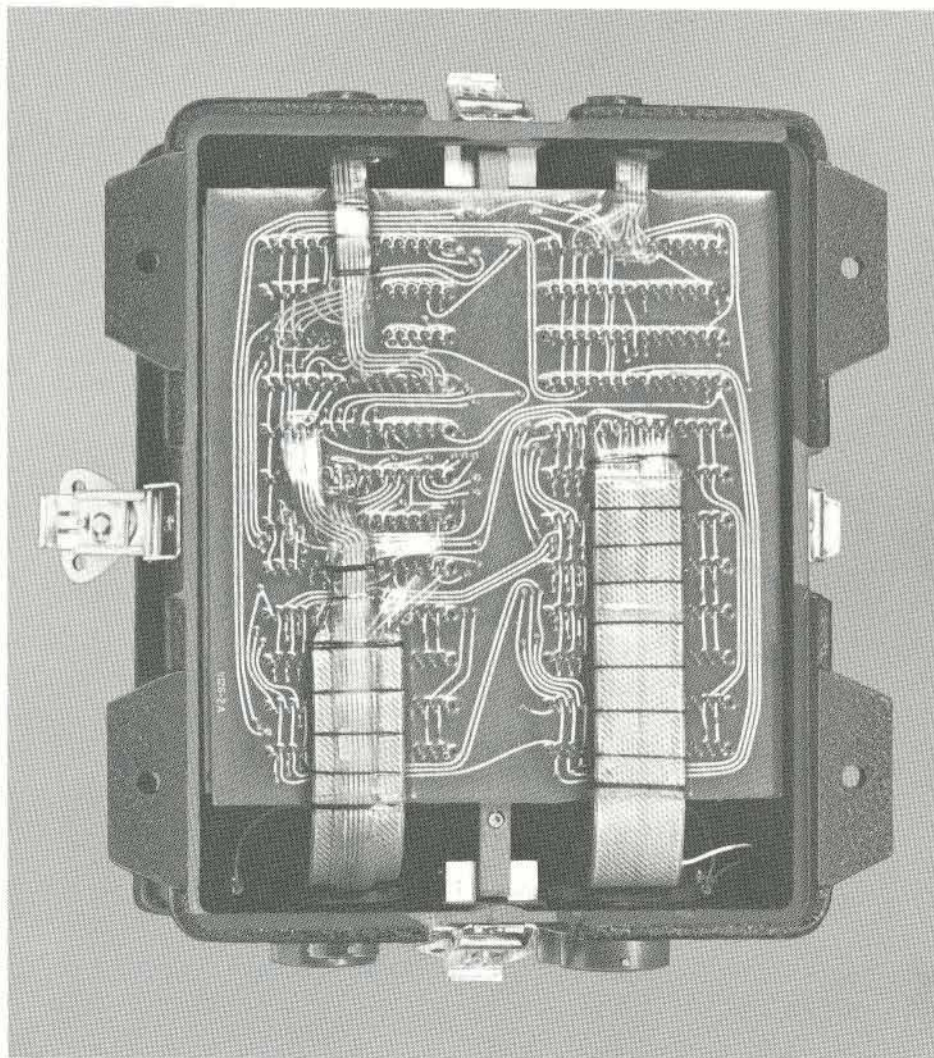
oratory or desk. The system will permit the user to remotely enter equations in their natural mathematical format and to obtain a graphical display of the solution, as well as printed data. Using the system will require no special training or knowledge on the part of the operator.

Under an Army contract, Brown's Research Laboratories conducted studies to gather information for the design of a defense system against ballistic missiles. In still another project, the electronic properties of super-conducting thin metal films were studied for the Navy.

Brown's Research Laboratories marked several significant developments in the use of lasers. A laser velocimeter, to

measure the velocity of flowing gases and liquids, represents a major breakthrough in the state of the art of velocity sensors. The use of a laser to measure the mechanical vibrations of surfaces was also studied.

ELECTRONICS / Another key block in the foundation for future diversification is Brown's move in the electronics field from a support services source to a designer and builder of sophisticated systems and subsystems. A number of significant developments contributed to this transition. The company was awarded two multi-million dollar contracts to build large electronic ground support systems for the Saturn V space vehicle. A New England manufacturer



Examples of multi-layer circuit boards and printed cabling developed and manufactured by Brown Engineering and its subsidiary, Electro-Mechanisms. Circuitry shown above is part of telemetry equipment used to transmit vital data back to Earth from Saturn space vehicles.

of flexible printed cabling and multi-layer circuit boards was acquired as a subsidiary. A joint venture was effected with another company specializing in data acquisition systems. A new division, to be housed in a modern plant at Lewisburg, Tennessee, was created to continue the company's telemetry and instrumentation operations. Advances were made in the field of microcircuitry, new products were introduced, and other products were improved to take advantage of new market potentials and advancing technologies.

To link Saturn V space vehicles to automated checkout equipment, Brown is building discrete control equipment (DCE) and a digital data acquisition system (DDAS) for checkout and monitoring functions before and during the launching of these vehicles. The relationship of this equipment to NASA's Apollo program (moon mission) is depicted on the facing page.

The DCE, designed by Brown under an earlier contract, incorporates a high degree of reliability through the use of triple-redundant voter circuitry. This feature allows the DCE to continue to function in the event one of the signals from the Saturn Ground Computer is

lost. Further, if the computer should fail completely, the DCE's control panel allows vehicle checkout to be performed manually, avoiding the enormous cost of an aborted mission. The DCE is capable of receiving and processing command signals controlling up to 2016 discrete functions within the vehicle. To accomplish this gigantic feat requires approximately 13,000 electronic module assemblies within each of the nine DCE systems currently being built.

The DDAS receives data transmitted from the Saturn vehicle, decodes it, and presents it for evaluation. The complexity of this equipment is indicated by the fact that 107 major racks of equipment are required.

Other contracts awarded to Brown Engineering during 1965 include one with the Air Force's Rome Air Development Center and one with NASA's Langley Research Center. The Rome contract is Brown's first major research contract with the Air Force and calls for the company to investigate the fundamental limitations of negative-resistance semi-conductor devices used in communications systems. The Langley contract is for design, development, and manufacture of an aircraft-to-aircraft ranging and altimeter system.

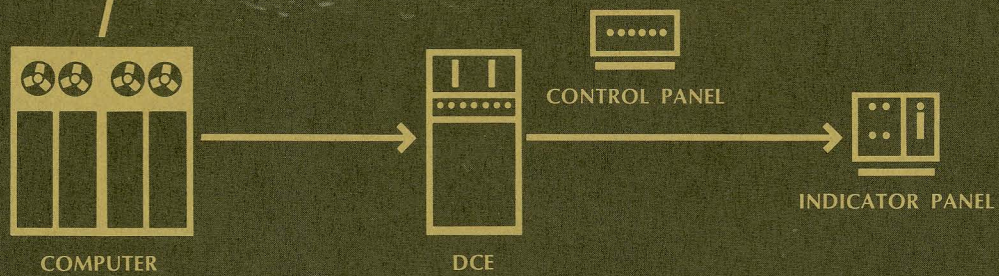
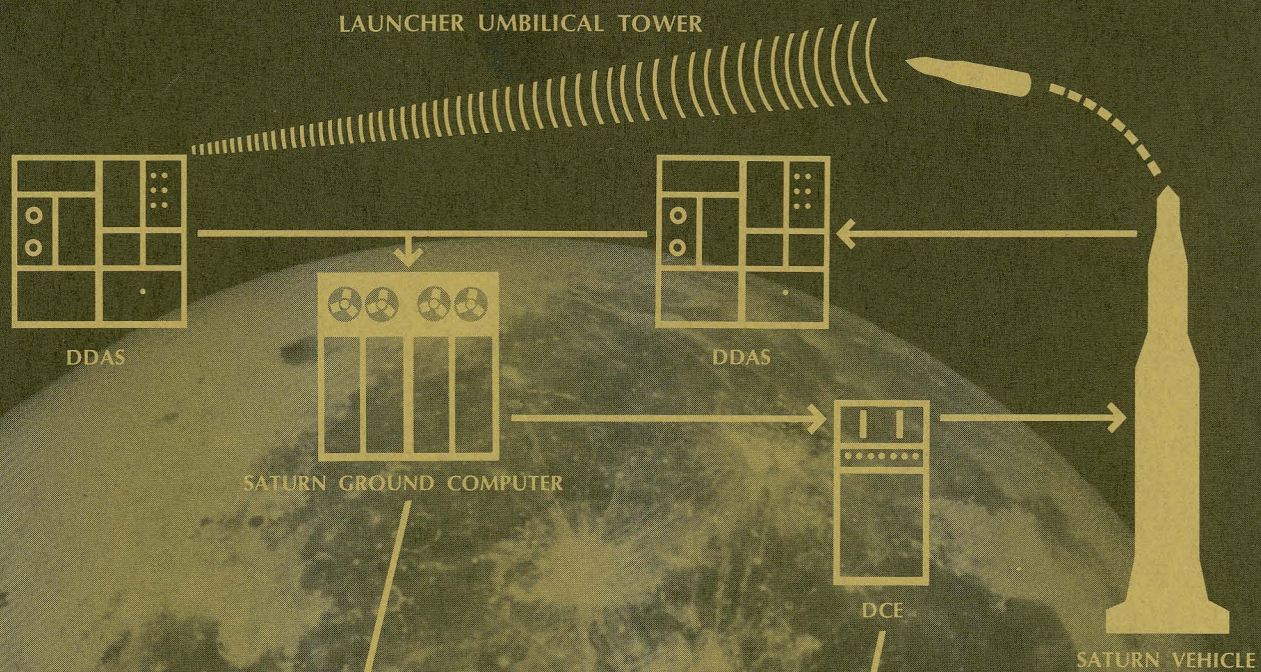
Brown continues to be the largest supplier of telemetry and instrumentation equipment for the Saturn program, not only to NASA, but to many of NASA's prime contractors as well. These include North American Aviation, Boeing, Douglas, IBM, and General Electric. Plans are underway to add a line of industrial and commercial telemetry equipment to the aerospace and defense units Brown builds. Telemetry equipment has applications for remote monitoring in process control, biomedicine, petroleum, and chemical industries.

Perhaps the most significant contributions to Brown's diversification in electronics are the subsidiary acquisitions and facility expansions that took place in 1965.

The acquisition of Electro-Mechanisms, Inc., finalized in 1965, has proven to be an extremely good investment. This young, dynamic, and profitable subsidiary has increased its gross sales from \$500,000 in 1964 to almost \$3 million in 1965. Electro-Mechanisms has facilities in Methuen, Massachusetts, and Nashua, New Hampshire, and is currently seeking new plant locations for future expansion of its printed circuit cabling and multi-layer circuit boards.

Two of Brown's Discrete Control Equipment (DCE) systems are shown here as parts of the Saturn Ground Computer System. Also shown is a Digital Data Acquisition System (DDAS), being built by Brown under contract to General Electric. A functional description of these systems follows: (1) One DCE is located at the Launcher Umbilical Tower (LUT) to automatically translate commands from the Saturn Ground Computer into discrete control functions for vehicle checkout (automatic mode). This DCE may also be operated in its manual mode to manually initiate control functions through a control panel, located either on the DCE itself (local manual mode) or up to 7 miles away (remote manual mode). (2) The DDAS receives signals from the Saturn vehicle which indicate the various events taking place in the vehicle during performance of vehicle checkout. These signals are translated into digital language by the DDAS and relayed to the Saturn Ground Computer for evaluation. The DDAS continues to receive data after vehicle launch through telemetry equipment. (3) The

Saturn Ground Computer at the LUT is connected to an identical computer at the Launch Control Center (LCC) so that the entire operation of the LUT computer is duplicated in the LCC computer. (4) A second DCE is located at the LCC and is connected to the LCC computer in the same way that the first DCE is connected to the LUT computer. Thus, since both DCE's are functioning in the same manner and receiving identical inputs, the outputs are likewise identical. (5) An indicator panel is connected to the output end of the second DCE in the same way that the Saturn vehicle is connected to the first DCE. Since the outputs of both DCE's are identical, the indicator panel can be made to indicate any or all of the control functions being applied to the vehicle. Thus, performance of the entire ground checkout procedure, taking place at the LUT, can be monitored at the LCC, before and after launch. In addition, all or any part of the checkout procedure can be controlled manually through the first DCE's control panel.



LAUNCH CONTROL CENTER

CONSOLIDATED BALANCE SHEETS

BROWN ENGINEERING COMPANY, INC., AND SUBSIDIARIES

December 31, 1965, and December 31, 1964

ASSETS

	December 31, 1965	December 31, 1964
CURRENT ASSETS		
Cash	\$ 571,021	\$ 419,211
Accounts receivable from United States Government	3,650,419	3,141,347
Other accounts and notes receivable, less allowance for doubtful accounts of \$5,000	4,090,135	1,390,714
Unbilled costs and fees under cost-plus-fee contracts	1,050,724	1,119,520
Inventories — Note B	4,357,333	1,471,560
Prepaid expenses	92,102	144,734
TOTAL CURRENT ASSETS	\$13,811,734	\$ 7,687,086
PROPERTY, PLANT, EQUIPMENT, AND LEASEHOLD IMPROVEMENTS — on the basis of cost		
Land	\$ 168,272	\$ 168,272
Buildings and site improvements	3,867,778	3,748,174
Leasehold improvements	1,645,194	1,535,101
Machinery, furniture, and equipment	3,717,446	3,026,517
	\$ 9,398,690	\$ 8,478,064
Less accumulated depreciation and amortization	3,586,635	2,754,862
	\$ 5,812,055	\$ 5,723,202
Construction in progress	163,741	16,514
Unamortized miscellaneous equipment	98,919	117,023
	\$ 6,074,715	\$ 5,856,739
OTHER ASSETS — Note C	427,761	173,414
TOTAL ASSETS	\$20,314,210	\$13,717,239

LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31, 1965	December 31, 1964
CURRENT LIABILITIES		
Notes payable to banks — unsecured	\$ 6,750,865	\$ 3,113,013
Accounts payable — trade	1,752,893	689,532
Accrued vacation, salaries, and wages	1,115,211	897,916
Pay roll taxes withheld and accrued	563,471	511,301
Other accounts payable and accrued expenses	142,010	101,863
Federal and state taxes on income — Note C	741,499	283,709
Current maturities on senior notes payable — Note D	125,000	125,000
TOTAL CURRENT LIABILITIES	\$11,190,949	\$ 5,722,334
LONG-TERM DEBT		
Senior notes payable — Note D	\$ 1,693,177	\$ 1,816,188
Notes payable to bank — unsecured	200,000	—0—
	\$ 1,893,177	\$ 1,816,188
STOCKHOLDERS' EQUITY		
Common Stock, par value \$1.00 a share:		
Authorized 1,200,000 shares; issued and outstanding:		
1965 — 747,473 shares; 1964 — 735,512 shares —		
Notes E and F	\$ 747,473	\$ 735,512
Capital in excess of par value of Common Stock — Note G	3,491,348	3,439,874
Retained earnings	2,991,263	2,003,331
	\$ 7,230,084	\$ 6,178,717
LEASES — Note H		
CONTINGENT LIABILITIES — Notes F, I, and J		
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$20,314,210	\$13,717,239

See notes to consolidated financial statements.

STATEMENT OF CONSOLIDATED INCOME AND RETAINED EARNINGS

BROWN ENGINEERING COMPANY, INC., AND SUBSIDIARIES

Years ended December 31, 1965, and December 31, 1964

	1965	1964
Net sales	\$45,302,418	\$42,381,754
Cost of sales	40,009,576	37,677,352
	<u>\$ 5,292,842</u>	<u>\$ 4,704,402</u>
General and administrative expense	2,726,591	2,851,452
INCOME FROM OPERATIONS	\$ 2,566,251	\$ 1,852,950
Other deductions:		
Interest expense	\$ 408,062	\$ 108,179
Other expenses — net	52,731	114,055
	<u>\$ 460,793</u>	<u>\$ 222,234</u>
INCOME BEFORE TAXES ON INCOME	\$ 2,105,458	\$ 1,630,716
Taxes on income — Note C:		
Federal income taxes	\$ 918,154	\$ 660,331
State income taxes	52,820	45,744
TOTAL TAXES ON INCOME	\$ 970,974	\$ 706,075
NET INCOME	\$ 1,134,484	\$ 924,641
Add retained earning at beginning of year	2,003,331	1,220,443
	<u>\$ 3,137,815</u>	<u>\$ 2,145,084</u>
Deduct cash dividends paid — \$.20 a share in 1965, and 1964	146,552	141,753
RETAINED EARNINGS AT END OF YEAR	<u>\$ 2,991,263</u>	<u>\$ 2,003,331</u>
Depreciation and amortization included above:		
Year ended December 31, 1965 — \$938,268.		
Year ended December 31, 1964 — \$845,715.		

See notes to consolidated financial statements.

STATEMENT OF CHANGES IN CONSOLIDATED WORKING CAPITAL

BROWN ENGINEERING COMPANY, INC., AND SUBSIDIARIES

Year ended December 31, 1965

Working capital at beginning of year		\$1,964,752
Additions:		
Cash funds provided by operations:		
Net income	\$1,134,484	
Provision for depreciation and amortization of property, plant, equipment, and leasehold improvements	938,268	
Amortization of miscellaneous equipment and other non-cash expenses	<u>143,315</u>	<u>2,216,067</u>
Increase in long-term debt		76,989
Sale of Common Stock under employee stock options		63,435
		<u>\$4,321,243</u>
Deductions:		
Cash dividends paid	\$ 146,552	
Net additions to property, plant, equipment, and leasehold improvements	<u>1,252,406</u>	<u>1,700,458</u>
Net increase in other non-current assets	301,500	
Working capital at end of year		<u>\$2,620,785</u>

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

BROWN ENGINEERING COMPANY, INC., AND SUBSIDIARIES

December 31, 1965

NOTE A—PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of Brown Engineering Company, Inc., and its wholly-owned subsidiaries. All significant inter-company accounts, transactions, and profits have been eliminated. Profits realized by the subsidiaries have been credited to the retained earnings account.

During 1965, the Company acquired Electro-Mechanisms, Inc., Methuen, Massachusetts, by issuing 25,571 shares of the Company's Common Stock in exchange for all of the issued and outstanding stock of Electro-Mechanisms, Inc. On or before May 15, 1969, the Company will deliver additional shares of the Company's Common Stock based on the average earnings of Electro-Mechanisms, Inc., as defined by the agreement, for the four years ending December 31, 1968, and the average market price of the Company's stock during the six month period ending May 15, 1969. The total Common Stock issued and delivered under this agreement shall, in no event, exceed 89,285 shares.

This transaction was accounted for as a pooling of interest and the accompanying financial statements include the accounts and results of operations of Electro-Mechanisms, Inc., for the years ended December 31, 1965, and December 31, 1964.

For comparative purposes, certain general and administrative expenses have been reclassified to cost of sales for the year ended December 31, 1964.

NOTE B—INVENTORIES

Inventories of raw materials and supplies of \$456,469 are priced at the lower of average cost or market. Work-in-process on fixed-price contracts of \$3,882,319 and finished goods of \$18,545 are priced at cost.

NOTE C—TAXES ON INCOME

Federal income tax returns of the Company have been examined by the Internal Revenue Service through 1964. Adjustments were made which lengthened the depreciation period of certain equipment to 1974; however, the Company has not changed its depreciation policies for financial statement reporting purposes as revenues realized from this equipment have been based on depreciation periods expiring in 1969.

The charge of \$118,040 resulting from this settlement has been included in other assets and will be amortized in future years when the tax benefits are realized.

NOTE D—SENIOR NOTES PAYABLE

The 6% senior notes payable of \$1,818,177 are repayable in semi-annual installments of \$62,500 each until February 1, 1974, and thereafter at \$130,630 each. The Company granted the lending institution a warrant, which is exercisable in whole or in parts at any time to February 1, 1974, to purchase a certain number of shares of its unissued Common Stock. At December 31, 1965, 21,000 shares remain under this warrant at a price of \$6.67 a share.

The notes provide, among other things, certain restrictions on the acquisition of the Company's own stock and on the payments of cash dividends. At December 31, 1965, retained earnings unrestricted as to these provisions amounted to \$970,882.

NOTE E—EMPLOYEES' STOCK OPTIONS

At December 31, 1965, 24,807 shares of authorized but unissued stock were reserved for stock options to key employees of the Company. The plan provides that no option may be exercised until the optionee has remained in the continuous employ of the Company for two years from the date of the option, after which the option may be exercised not later than five years from the date of granting the option. The stock may be purchased at not less than 95% of the fair market value thereof on the date the option is granted, or 110% in the case of any employee who owns more than 10% of the outstanding stock of the Company.

As of December 31, 1965, options which are exercisable within four years from the date of granting of the options covering an

aggregate of 13,860 shares of Common Stock were outstanding, including options totaling 1,980 shares granted to six officers of the Company.

Options outstanding at December 31, 1965, follow:

Date Options Granted	OPTION PRICE		
	Shares	Per Share	Total
June 17, 1963	12,960	\$15.83	\$205,157
June 17, 1963	300	18.33	5,500
August 17, 1964	100	12.95	1,295
September 10, 1965	300	13.18	3,954
December 13, 1965	200	16.15	3,230
TOTAL OPTION PRICE			\$219,136

Options for 500 shares were granted and options for 1,200 shares were cancelled during the year. Options for 11,961 shares were exercised during the year.

NOTE F—JOINT VENTURE AND OPTION TO ACQUIRE TRANS-DATA, INC.

On July 14, 1965, the Company entered into a joint venture with Trans-Data, Inc., Huntsville, Alabama. Under the terms of the joint venture agreement, the Company shall furnish financial assistance, supervision, and control. A line of credit of \$450,000 as of December 31, 1965, has been secured for the venture.

As consideration for entering into this agreement, the Company acquired an option to purchase, on or before August 31, 1966, all of the issued and outstanding shares, stock options, and warrants of Trans-Data, Inc., in exchange for Common Stock of the Company which will not exceed 22,857 shares. The Company has agreed to issue additional common shares, not to exceed 20,000 shares, based on the incentive earnings of Trans-Data, Inc., as defined in the option agreement, for the period of three years and eight months, ending December 31, 1969. The Company had not exercised its option at December 31, 1965.

NOTE G—CAPITAL IN EXCESS OF PAR VALUE OF COMMON STOCK

The increase of \$51,474 in Capital in Excess of Par Value of Common Stock represents the excess of the proceeds over par value of

11,961 shares of Common Stock issued under the employee stock option plan.

NOTE H—LEASES

The Company has leased certain buildings at a monthly rental of approximately \$15,200. These leases expire on June 30, 1966, with six one-year renewal options. Approximately 170,000 square feet of the total 247,926 rentable square feet has been sub-leased under leases which expire June 30, 1966. In addition, the Company is leasing certain other buildings at a monthly rental of approximately \$11,000 under leases which expire at various times until November, 1970.

The Company is also leasing certain equipment on which the annual rental aggregates \$8,000; the majority of these leases expire next year. The Company is also leasing electronic computer equipment on a current basis with a monthly rental of approximately \$38,000.

In addition, the Company has entered into an Indenture of Lease with the City of Lewisburg, Tennessee, for the construction of facilities to be used by the Company. The Company has guaranteed payment of Bonds issued by the City for construction of these facilities by entering into this lease which is for a term of fifteen years ending October 31, 1980. The annual rental for the lease year ending October 31, 1966, is approximately \$29,000 and approximately \$65,000 for each lease year thereafter. The lease provides for six successive renewal options of ten years each at a maximum rental of \$6,000 a year.

NOTE I—DEFERRED COMPENSATION AND PENSION PLANS

The Company has a non-contributory insured pension plan and a contributory deferred compensation plan for all eligible employees. The Company's contributions to these plans for 1965 were \$230,234 and \$743,911, respectively. As of December 31, 1965, the estimated cost to fund the remaining balance of past service liability applicable to the non-contributory pension plan was \$30,000.

NOTE J—RENEGOTIATION

Substantially all of the Company's business is subject to profit limitation as determined by the Renegotiation Board. The Company has been notified by the Renegotiation Board that no further action is anticipated for years ending with or prior to December 31, 1964. The Company believes that no refund will be required for the year ended December 31, 1965.

ERNST & ERNST

409 LEEMAN FERRY ROAD, S. W.
HUNTSVILLE, ALA. 35801

Board of Directors
Brown Engineering Company, Inc.
Huntsville, Alabama

We have examined the consolidated balance sheet of Brown Engineering Company, Inc., and subsidiaries as of December 31, 1965, and the related statements of consolidated income and retained earnings and changes in consolidated working capital for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We made a similar examination of the financial statements for the preceding year.

In our opinion, the accompanying consolidated balance sheet and statements of consolidated income and retained earnings present fairly the consolidated financial position of Brown Engineering Company, Inc., and subsidiaries at December 31, 1965, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. It is also our opinion that the statement of changes in consolidated working capital presents fairly the information shown therein.

February 1, 1966

Ernst & Ernst

FINANCIAL REVIEW

SALES AND NET INCOME

For the year 1965, sales and profits of Brown and its subsidiaries reached all-time highs. Sales of \$45,302,418 were 7% above 1964, and net income climbed 23% over the year-earlier to \$1,134,484. This is the fifth straight year that the Company has experienced gains in sales and earnings.

Earnings per share in 1965 were \$1.52; 28 cents a share higher than 1964 earnings of \$1.24 a share. Computations were based on 747,473 shares outstanding at Dec. 31, 1965.

Sales from mission support activities for the National Aeronautics and Space Administration's Marshall Space Flight Center at Huntsville in 1965 were \$22,585,738, down 19% from 1964, but other sales were up 55% over 1964 to \$22,716,680. Net income from mission support sales in 1965 was \$366,484, down 21% from 1964. Profits on other sales increased 66% to \$768,000.

SUBSIDIARIES AND JOINT VENTURE

Subsidiaries: The following information on subsidiary operations is prior to eliminations for consolidated reporting.

Electro-Mechanisms, Inc., with plants in Methuen, Massachusetts, and Nashua, New Hampshire, had sales of \$2,908,531 with a net income of \$199,504.

Information Sciences, Inc., organized May 17, 1965, in Atlanta, Georgia, had

sales of \$96,808, with a loss of \$67,434 — which was anticipated.

Space Resources, Inc., owner of the facilities at 300 Sparkman Drive, Huntsville, Alabama, occupied by Brown Engineering Company, Inc., added 15,000 square feet of engineering space as well as paving and lighting of the parking lot. These capital expenditures cost \$246,200.

Joint Venture: On July 14, 1965, the Company entered into a joint venture agreement, including an option to purchase, with Trans-Data, Inc., Huntsville, Alabama. As of December 31, 1965, the Company's share of undistributed gross earnings amounted to \$15,760. It is anticipated that the option to acquire Trans-Data, Inc., will be exercised in accordance with the agreement after April 30, 1966, and before August 31, 1966.

CONTRACTS

At year end, a contract backlog of approximately \$19,000,000 existed in comparison to last year's backlog of approximately \$10,000,000. Only three months backlog for four mission support contracts to NASA's Marshall Space Flight Center is included. The sales volume for the first year under these cost plus award fee contracts (ending March 31, 1966) is estimated to be \$18,800,000 and each contract contains an option

for four one-year renewals. It is anticipated that all contracts will be renewed.

SHORT-TERM FINANCING

Brown Engineering Company's unsecured line of credit was increased to \$8,500,000 and realigned among the following participating banks: The First National Bank, Huntsville; Third National Bank, Nashville, Tennessee; The Chase Manhattan Bank, New York; The Citizens & Southern National Bank, Atlanta, Georgia; and The Birmingham Trust National Bank, Birmingham, Alabama. In addition, Electro-Mechanisms, Inc., has obtained an open line of credit of \$400,000 from Arlington Trust Company, Lawrence, Massachusetts.

Short-term borrowings for the year increased to an average of \$4,600,000 and peaked at year-end with \$6,750,000 outstanding. It is anticipated that an increase in our line of credit will be required during the year 1966 to finance anticipated increases of work in process inventory and accounts receivable.

DIVIDENDS

Dividends equal to 20¢ per share for the year were disbursed in quarterly declarations of 5¢ per share. The 22nd consecutive dividend was paid on December 17, 1965, bringing the total yearly dividend to \$146,552. The Chase Manhattan Bank, New York, N. Y., acts as Dividend Disbursing Agent.

Stock Traded—

American Stock Exchange

Transfer Agent—

The Chase Manhattan Bank
1 Chase Manhattan Plaza
New York, N. Y. 10015

Co-Transfer Agent—

The Citizens & Southern National Bank
P. O. Box 4899
Atlanta, Georgia 30302

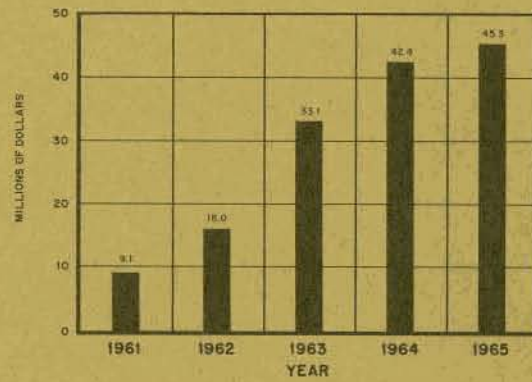
Registrar—

United States Trust Company of New York
45 Wall Street
New York, N. Y. 10005

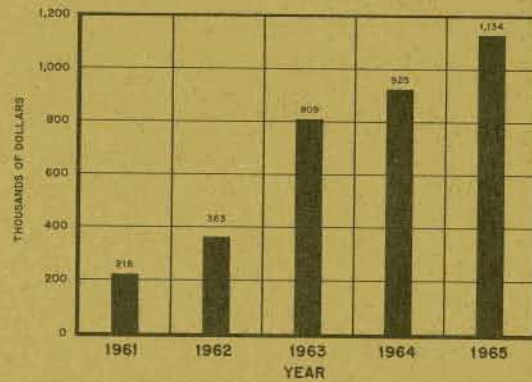
Co-Registrar—

First National Bank of Atlanta
P. O. Box 4148
Atlanta, Georgia 30302

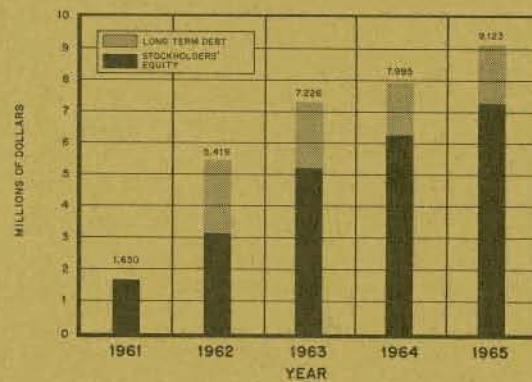
SALES



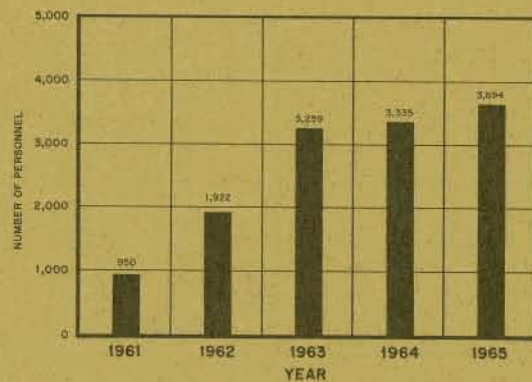
NET INCOME



STOCKHOLDERS' EQUITY AND LONG TERM DEBT



PERSONNEL AT END OF YEAR



A joint venture with Trans-Data, Inc., may soon result in Brown's acquisition of this Huntsville-based company. Trans-Data, Inc., has specialized capabilities in the design and development of ground-based data acquisition systems.

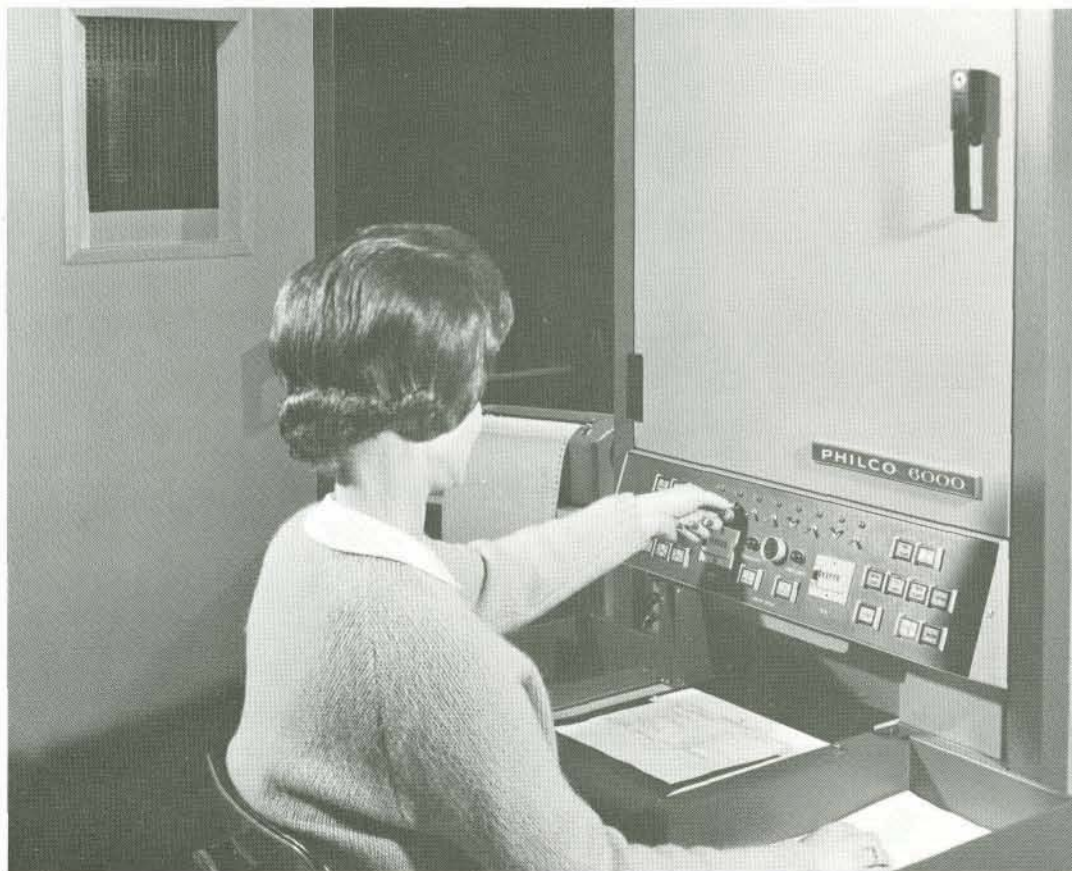
Lewisburg, Tennessee, is the site of another expansion of Brown's electronics capabilities. A new manufacturing plant is being built on a 30-acre site in Lewisburg's new industrial park. The plant will allow Brown to maintain its position as a principal supplier of telemetry and instrumentation equipment for the space program and will meet the additional floor space requirements for the future emergence of the company into commercial markets.

Another addition occurring in 1965 was the establishment of a microcircuit laboratory in the Huntsville facility. Microelectronic packaging techniques now being developed will be used to develop a transmitter that will send up to 50 channels of data. The unique aspects of this transmitter is that it will be only one inch in diameter by five inches long, and will transmit data from within the shaft of a rotating turbine.

New electronic products developed in 1965 by Brown include a "solder-leveling" machine for applying protective solder coatings to printed-circuit boards for extremely high-reliability applications. This machine represents a sig-

nificant advance in the state of the art, because it can decrease production time and costs over previous methods.

Several accessory items have been developed for the Brown closed-circuit television camera. These include an optical pan/tilt/zoom device which enables an operator to vary the camera's field of view from a remote location while the camera itself remains stationary. The camera has also undergone redesign. As a result, it can be built more economically and offers improved reliability, performance, maintainability, and flexibility. Additionally, the Brown camera can be modified so that it will be sensitive to infrared light for detection of hydrogen fires. It is expected that this modification will find



Optical scanning equipment recently installed at Brown's Huntsville facility to convert type-written characters directly into magnetic tape entries and microfilm records. This device can "read" five different type fonts at the rate of 2,000 characters per second.

widespread applications in both government and commercial areas. Strobe lighting is also being used in conjunction with the camera, lending to a variety of "exploring" applications: inspection of caves, drilled holes, and buried pipe lines.

Another product improvement is the adaptation of the company's BECON printed-circuit connectors as microcircuit carriers. An outstanding feature of these connectors is that the microcircuits are held to the carrier by spring clips instead of solder, facilitating considerably the replacement of circuit elements. This approach is currently be-

ing used in two major airborne navigation projects. Brown's BECON connector line has now been expanded to 29 basic types, four of which were added in 1965. In addition, Brown makes 12 types of custom-designed BECON connectors for special applications.

INFORMATION SCIENCES / Brown's capabilities in computer sciences increased significantly in 1965. A wholly-owned subsidiary, Information Sciences, Inc., was established in Atlanta. An IBM 360 computer and a Philco 6000 optical scanner were installed at the Huntsville facility. A centralized information-dissemination system was de-

veloped for shipboard helicopter maintenance. And several extremely complex computer simulation models were developed for the U.S. Army and NASA, including an analysis of the saturation probability of a defensive missile system and a detailed analysis of a wheeled vehicle operating over the surface of the moon.

Information Sciences, Inc., Brown's new subsidiary, is presently providing data processing services, automated engineering and management services, and technical publications services to aircraft, aerospace, defense, and commercial customers, including many small



Disc storage unit of IBM 360, Model 40, computer, recently installed at Brown's computer facility. This disc system offers several operating advantages over magnetic tape.

businesses throughout the Southeast. Since this subsidiary was established in Atlanta, Georgia, only last July, employment has more than doubled and branch offices have been established in four Southeastern cities: Huntsville, Birmingham, and Montgomery, Alabama, and Merritt Island, Florida.

In order to better serve this market, an IBM 360, Model 40, computer was installed. In support of its program to develop an automated engineering data system for the U. S. Army, Brown installed an advanced optical scanner that directly converts typed words and numerals to computer symbols and

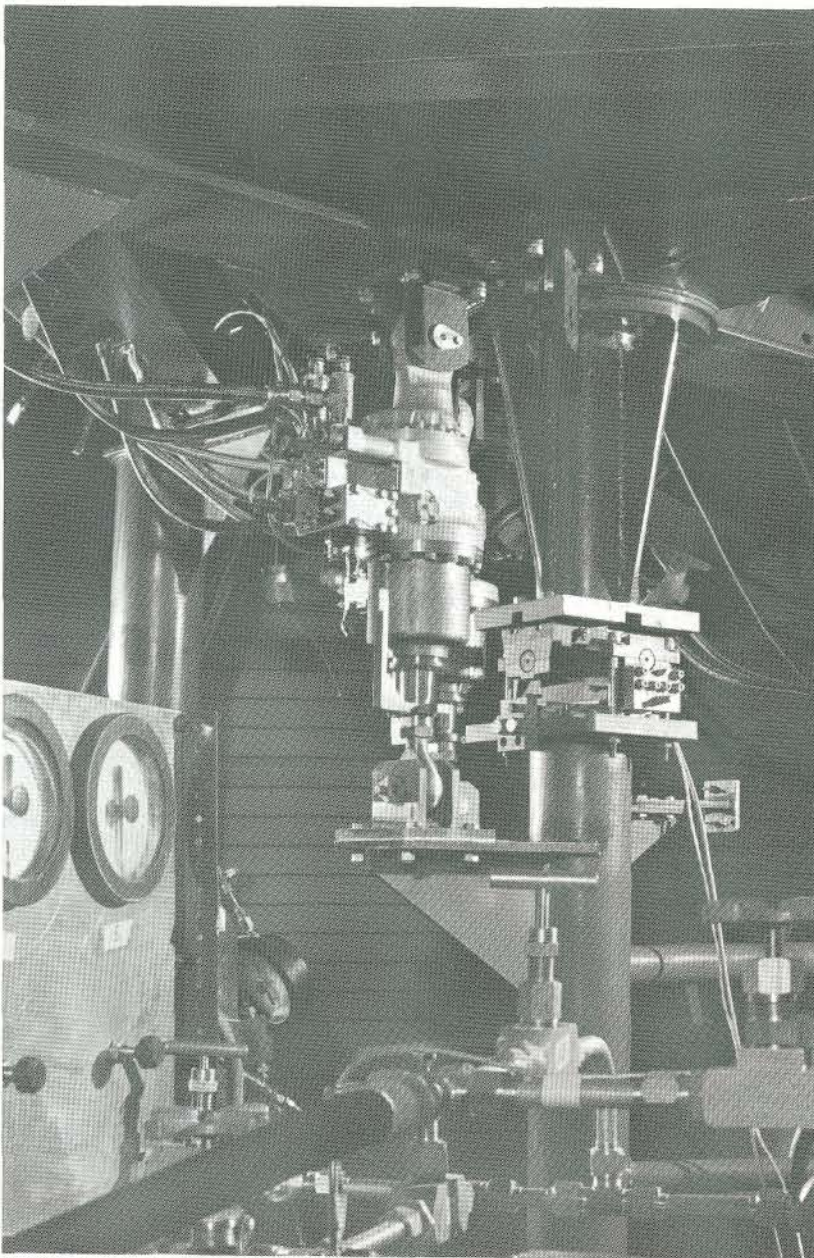
transcribes them on magnetic tape. This sophisticated technique virtually eliminates the time-consuming chore of keypunching information before placing it on tape.

Under a contract with the U. S. Army, Brown designed and developed an information-dissemination system for use in a floating aircraft maintenance facility for offshore maintenance and repair of helicopters. This system allows any of the various shops aboard ship to quickly obtain maintenance and repair information from a central data storage unit. Brown's system, which is micro-film oriented, utilizes facsimile trans-

mission and closed-circuit television to bring the needed information to the particular shop.

Brown also developed a method for the automatic writing of military specifications by computer, and a computer simulation program for evaluating the mobility performance of wheeled vehicles on the moon's surface is being investigated by Brown for NASA.

STRUCTURAL AND MECHANICAL SYSTEMS / Over the years Brown has established and expanded specialized fabrication and testing capabilities to support the company's intimate role



Test fixture in Brown Engineering's Test Laboratory for dynamic testing of rocket engine gimbals. Gimbal under test is for engine used in third stage of Saturn V space vehicle.

in space and defense programs. These capabilities are a part of the foundation from which Brown expects to launch its new look of diversification. The company's design and manufacturing experience, combined with testing, enables the company to turn concepts into models and test them under extreme environments, a broad capability lending to the development of mechanical, hydraulic, and pneumatic systems.

Brown's structural and mechanical fabrication facility performed such divergent tasks as the construction of ground handling equipment for the various

stages of the mammoth Saturn V moon rocket to the fabrication of tiny test fixtures and models in support of an Army development program for gyroscopes and related devices. Other accomplishments include the construction of the vertical portion of a lift-off simulator, which is being used to simulate the vertical and horizontal motion of a Saturn V space vehicle during launch. A project for the Army Missile Command involved Brown in the design and fabrication of a temperature conditioning system for the engine and propellants of the Lance missile system.

During the past year, the company's

test and manufacturing facilities and personnel have served NASA at both the Marshall Space Flight Center and the Kennedy Space Center. Hydraulic gimbal systems for positioning the engines on the Saturn vehicle were designed, built, and subjected to extreme environments to verify design requirements. Seals in an umbilical coupling, linking ground support equipment to a Saturn vehicle, were subjected to temperatures colder than -400° Fahrenheit to evaluate their capabilities in such extreme conditions. In addition, Brown was heavily involved in an extensive component testing program for KSC. The company continued

Recently completed Huntsville Public Library, designed by Reed-Mullins and Associates, Brown Engineering's architecture-engineering division.



to participate in the manufacture and testing of giant arms it designed to support service lines going from ground equipment to the Saturn vehicles. Brown also evaluated the reliability of electrical, mechanical, hydraulic, and pneumatic components for the Saturn ground support equipment, and the company built and installed electronic instrumentation equipment for handling hazardous liquid propellants used in space vehicles.

ARCHITECTURE AND FACILITIES ENGINEERING / During 1965, Brown continued to expand its capabilities in architecture and facilities engineering, with

services being provided to NASA, the U. S. Navy, industry, municipal governments, and private citizens.

Reed-Mullins and Associates, Brown's architects-engineers, designed a new Federal Office Building and Court House in Tuscaloosa, Alabama. The modern three-story structure will feature a penthouse and will contain approximately 63,000 square feet of floor space.

Brown's Facilities Engineering Department performed work on a turbine engine test facility for the U. S. Navy, completed design and construction

drawings for Brown's new test facility, and designed a thermal insulation test facility and a mobile acoustic research laboratory for NASA's George C. Marshall Space Flight Center (MSFC). The mobile acoustic research laboratory is an easily-movable acoustic test facility for exposing large test specimens, weighing up to 30,000 pounds, to the tremendous noise levels produced by a Saturn V booster while it is being test fired. Brown helped develop comprehensive master plans for MSFC facilities in Huntsville, Alabama, and Michoud, Louisiana, covering such items as railroads, utilities, roadways, drainage, security, and civil defense.



Herbert Johnson Towers, a recently completed apartment building for the aged, was designed by Brown's Reed-Mullins and Associates. This eight-story structure is conveniently located near several of Huntsville's shopping centers and incorporates many unique conveniences, particularly suitable to its residents.

THE FUTURE

Upon the recommendation of the board of directors, a Corporate Development and Planning Committee was organized to examine the future goals of the company and to apply its talents to the solution of problems vital to Brown's continued growth and development. This committee has developed an aggressive plan for growth that includes sales and profit goals and acquisition plans for Brown. Further, a Future Programs Office was established to enhance the company's opportunities for participating in new government and industry research and development programs and to broaden Brown's participation in existing programs.

In the future, Brown expects to command a major role in significant new developments on earth, as well as outer space. Aggressive goals for sales, earnings, market expansion, and technological advances are a part of this course. Such goals are considered realistic, because Brown's interests over the next decade parallel the demands and problems America's growing population and prosperity are expected to create. Brown believes that it is in a strong position to make important contributions to future space developments, because of the association the company has with today's moon program in its work for NASA.

The company looks forward to increased participation in missile development programs for the Army, as well as the research and development tasks of other branches of the military. Brown also expects to be one of the companies that will contribute solu-

tions to America's mass transportation problems on earth. It believes that the same technologies that will carry man from earth to the moon can be applied to get man from his home to his office. The company's expanding electronics capabilities promise to give Brown a significant share of the rapid growth market for large special-purpose systems, special packaging devices, micro-circuitry, and closed-circuit television.

Brown expects to be a prominent competitor for the virtually unlimited information retrieval and computer service market. Through a subsidiary, the company has already made a position for itself in this commercial field. As department stores, warehouses, utilities, and others turn to computers to serve their growing lines of customers, Brown's future is expected to spiral upward in this area. Laser research, carried on by the company for several years, is expected to bring about significant applications for this exotic light source in medicine and industry. Specialized design, engineering, manufacturing, and testing capabilities within the same complex has put Brown in an excellent position to participate in the development of major systems.

The company's contributions in the form of modern hospitals, libraries, industrial plants, and other public buildings are expected to be recognized as engineers and architects are chosen for the future development of the nation's communities.

The company looks to this future with optimism and enthusiasm.

BROWN ENGINEERING FACILITIES

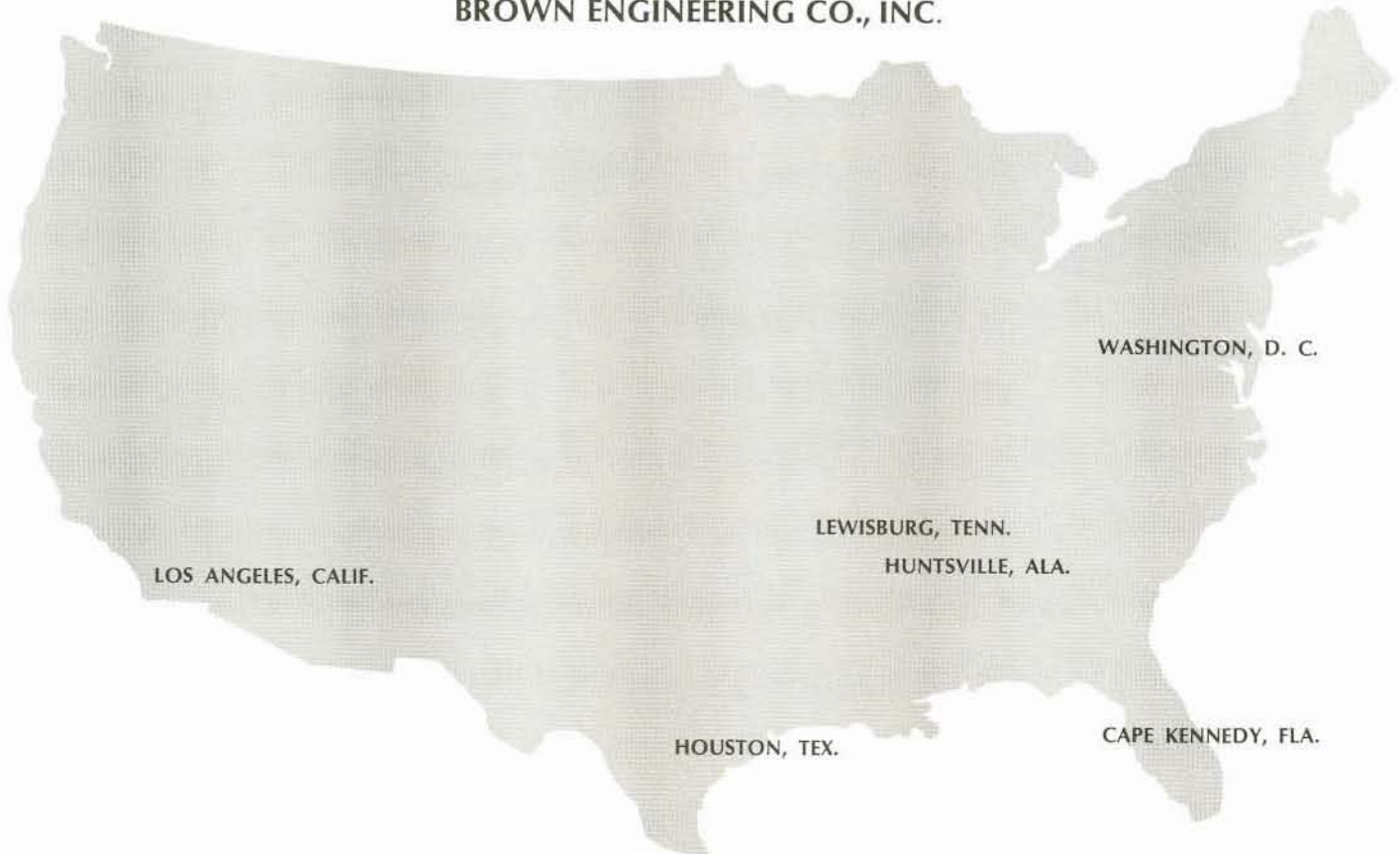
ELECTRO-MECHANISMS, INC.



INFORMATION SCIENCES, INC.



BROWN ENGINEERING CO., INC.





OFFICERS AND DIRECTORS

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 Joseph C. Moquin, Executive Vice President
 Robert B. Anderson, Senior Vice President
 William A. Giardini, Vice President
 Raymond C. Watson, Jr., Vice President
 Jack W. Hendrix, Vice President of Administration
 William L. Vernon, Secretary and Treasurer

DIRECTORS

Milton K. Cummings, Chairman
 Robert B. Anderson
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 H. E. Monroe
 Joseph C. Moquin
 Sidney K. Tally
 Kenneth J. Thornhill
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